

IN THE CLAIMS:

Please cancel claim 28.

Please amend claim 1, 7, 13, 19, 25-31 and 33 as follows:

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A3
1. (Once amended) A vertical cavity surface emitting laser (VCSEL), comprising:

an active region further comprising at least one quantum well having a well depth of at least 40 meV and comprised of InGaAsSbN and barrier layers sandwiching said at least one quantum well; and
confinement layers sandwiching said active region.

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7. (Once amended) The VCSEL of claim 1 wherein said at least one quantum well further comprises >1% N.

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13. (Once amended) The VCSEL of claim 1 wherein said at least one quantum well is up to and including 50Å in thickness.

A6 B1
19. (Once amended) The VCSEL of claim 1 wherein said at least one quantum well further comprises >1% N.

B1
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25. (Once amended) A vertical cavity surface emitting laser (VCSEL), comprising:

an active region further comprising at least one quantum well having a well depth of at least 40 meV and comprised of InGaAsSbN and barrier layers sandwiching said at least one quantum well; and

AlGaAs confinement layers sandwiching said active region.

26. (Once amended) The VCSEL of claim 25 wherein said barrier layers are comprised of GaAsP.

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27. (Once amended) The VCSEL of claim 25 wherein said barrier layers are comprised of AlGaAs.

28. (DELETED)

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29. (Once amended) The VCSEL of claim 25 wherein said at least one quantum well further comprises $>1\%$ N.

30. (Once amended) The VCSEL of claim 29 wherein said barrier layers are comprised of GaAsP.

31. (Once amended) The VCSEL of claim 29 wherein said barrier layers are comprised of AlGaAs.

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33. (Once amended) A vertical cavity surface emitting laser (VCSEL), comprising:

an active region further comprising at least one quantum well having a well depth of at least 40 meV and comprised of InGaAsSbN and barrier layers sandwiching said at least one quantum well; and

AlGaAs confinement layers sandwiching said active region;

wherein said quantum well contains greater than 1% N.

Un-amended Claims remain in the application as follows:

2. (*Not amended*) The VCSEL of claim 1 wherein said barrier layers are comprised of GaAsP.

3. (*Not amended*) The VCSEL of claim 1 wherein said confinement layers are comprised of AlGaAs.

4. (*Not amended*) The VCSEL of claim 2 wherein said confinement layers are comprised of AlGaAs.

5. (*Not amended*) The VCSEL of claim 3 wherein said barrier layers are comprised of AlGaAs.

6. (*Not amended*) The VCSEL of claim 1 wherein said barrier layers are comprised of AlGaAs.

8. (*Not amended*) The VCSEL of claim 7 wherein said barrier layers are comprised of GaAsP.

9. (*Not amended*) The VCSEL of claim 7 wherein said confinement layers are comprised of AlGaAs.

10. (*Not amended*) The VCSEL of claim 8 wherein said confinement layers are comprised of AlGaAs.

11. (*Not amended*) The VCSEL of claim 7 wherein said barrier layers are comprised of AlGaAs.

12. *(Not amended)* The VCSEL of claim 9 wherein said barrier layers are comprised of AlGaAs.

14. *(Not amended)* The VCSEL of claim 13 wherein said barrier layers are comprised of GaAsP.

15. *(Not amended)* The VCSEL of claim 13 wherein said confinement layers are comprised of AlGaAs.

16. *(Not amended)* The VCSEL of claim 14 wherein said confinement layers are comprised of AlGaAs.

17. *(Not amended)* The VCSEL of claim 13 wherein said barrier layers are comprised of AlGaAs

18. *(Not amended)* The VCSEL of claim 13 wherein said barrier layers are comprised of AlGaAs.

20. *(Not amended)* The VCSEL of claim 19 wherein said barrier layers are comprised of GaAsP.

21. *(Not amended)* The VCSEL of claim 19 wherein said confinement layers are comprised of AlGaAs.

22. *(Not amended)* The VCSEL of claim 20 wherein said confinement layers are comprised of AlGaAs.

23. *(Not amended)* The VCSEL of claim 19 wherein said barrier layers are comprised of AlGaAs.